## What is claimed is:

A communication system comprising:

a first communication unit sending
transmission data, a control sequence, and an
extended control sequence, wherein said control

5 sequence is originally defined by a protocol, and
said extended control sequence is undefined by
said protocol and is provided for requesting an
extended operation, and said control sequence
includes an abort sequence requesting for

10 abortion of said transmission data,

a second communication unit receiving said transmission data, said control sequence, and said extended control sequence, and executing said extended operation in response to said extended control sequence, wherein said extended control sequence includes said abort sequence.

- 2. The communication system according to claim
  1, wherein said protocol is PPP (Point-to-Point
  Protocol), and said abort sequence is represented
  by "7D. 7E" in the hexadecimal notation.
- The communication system according to claim
   , wherein said extended control sequence
   consists of a plurality of said abort sequence.

The communication system according to claim
 wherein said first communicating unit divides

said transmission data into a plurality of divided data, and sequentially transmits said

5 plurality of divided data to said second communication unit, and

wherein said second communicating system reproduces said transmission data from said plurality of divided data in response to said to extended control sequence.

- 5. The communication system according to claim 1, wherein said first communication unit includes:
- a transmission high order layer generating 5 said transmission data;
  - a transmission FIFO transiently storing said transmission data, and sequentially outputting said transmission data; and
- a transmission data processor reading said

  10 transmission data out of said transmission FIFO
  to transmit said transmission data to said second
  communication unit, and

said transmission data processor divides
said transmission data into a plurality of
15 divided data when an underflow occurs in said
transmission FIFO, and sequentially transmits

said plurality of divided data to said second communication unit, and

said second communication unit reproduces

20 said transmission data from the plurality of
divided data in response to said extended control
sequence.

- 6. The communication system according to claim
  1, wherein said first communication unit
  includes:
- a CRC indicating unit outputting a CRC indication sequence as said extended control sequence for indicating a CRC (Cyclic Redundancy Check) method; and

a CRC calculator calculating a CRC code according to said CRC method and outputting said 10 CRC code to said second communication unit, and

said second communication unit executes a CRC on said transmission data in response to said CRC indication sequence based on said CRC code according to said CRC method.

- 7. The communication system according to claim 1, wherein said first communication unit includes:
- an operation test indicating unit 5 outputting an operation test indicating sequence

as said extended control sequence, and outputting test data. and

said second communication unit executes an operation test based on said test data in

10 response to said operation test indicating sequence.

- 8. The communication system according to claim 1, wherein said second communication unit sends a predetermined signal to said first communication unit in response to said extended control 5 sequence.
  - 9. A communication system comprising:

a first communication unit transmitting first transmission data; and

a second communication unit receiving said

5 first transmission data, and transmitting second
transmission data, a control sequence, and an
extended control sequence to said first
communication unit, wherein said control sequence
is originally defined by a protocol, and said

10 extended control sequence is undefined by said
protocol, and said control sequence includes an

abort sequence requesting for abortion of said

second transmission data, and

said extended control sequence includes

15 said abort sequence, and

said first communication unit adjusts a rate of transmitting said first transmission data in response to said extended control sequence.

- 10. The communication system according to claim 9, wherein said protocol is PPP (Point-to-Point Protocol), and the abort sequence is represented by "7D, 7E" in the hexadecimal number system..
- 11. The communication system according to claim 9, wherein said second communication unit includes:
- a reception FIFO receiving and storing said 5 first transmission data: and

said extended control sequence is generated in accordance with a state of said reception FIFO.

- 12. The communication system according to claim 9, wherein said first communication unit divides said first transmission data into a plurality of divided data, and transmits said plurality of
- 5 divided data and another extended control sequence to said second communication unit, and

said second communicating system reproduces said first transmission data from said plurality of divided data in response to said another

10 extended control sequence.

13. A transmitter comprising:

 $\label{eq:adata} \mbox{a data receiver receiving transmission}$   $\mbox{data: and}$ 

a sending unit sending said transmission

- 5 data, a control sequence and an extended control sequence, wherein said control sequence is originally defined by a protocol, and said extended control sequence is undefined by said protocol and is provided for requesting an
- 10 extended operation, and

said control sequence includes an abort sequence requesting for abortion of said transmission data.

- 14. The transmitter according to claim 13, wherein said protocol is PPP (Point-to-Point Protocol), and said abort sequence is represented by "7D, 7E" in the hexadecimal notation.
- 15. The transmitter according to claim 13, wherein said extended control sequence consists of a plurality of said abort sequence.
- 16. A receiver comprising:
  a receiving unit receiving transmission

data, a control sequence, and an extended control sequence, wherein said control sequence is

- originally defined by a protocol, and said extended control sequence is undefined by said protocol and is provided for requesting an extended operation, and said control sequence includes an abort sequence requesting for
- 10 abortion of said transmission data; and

an outputting unit outputting said transmission data,

wherein said receiving unit executes said extended operation in response to said extended to control sequence, and

said extended control sequence includes  $\mbox{said abort sequence.}$ 

- 17. The receiver according to claim 16, wherein said protocol is PPP (Point-to-Point Protocol), and said abort sequence is represented by "7D, 7E" in the hexadecimal notation.
- 18. The receiver according to claim 16, wherein said extended control sequence consists of a plurality of said abort sequence.
- 19. A communication method comprising: sending transmission data;

sending a control sequence originally

defined by a protocol wherein said control

sequence includes an abort sequence requesting

for abortion of said transmission data:

sending an extended control sequence,
wherein said extended control sequence is
undefined by said protocol and is provided for
10 requesting an extended operation;

receiving said transmission data, said control sequence, and said extended control sequence; and

executing said extended operation in

15 response to said extended control sequence,
wherein said extended control sequence includes
said abort sequence.

- 20. The communication method according to claim 19, wherein said protocol is PPP (Point-to-Point Protocol), and said abort sequence is represented by "7D, 7E" in the hexadecimal notation.
- 21. The communication method according to claim 19, wherein said extended control sequence consists of a plurality of said abort sequence.